REMARKS

Claims 1-50 remain pending in the present application. Claims 1, 2, 4, 13, 16-18, 20-23, 25, 26, 38-44 and 46-48 are rejected. Claims 3, 5-12 14, 15, 19, 24, 27-37, 45, 49 and 50 are objected to.

The Examiner rejected claims 1-2, 4, 13 16-18, 20-23, 25-26, 38-39, 40-44, 46-48 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,773,931 (***Pasadyn***) in view of U.S. Patent No. 7,051,250 (***Allen***). Applicants respectfully traverse this rejection.

Applicants respectfully assert that ***Pasadyn***, ***Allen***, or their combination do not teach or make obvious all of the elements of claims of the present invention. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Third, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. Moreover, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); M.P.E.P. § 2143.03.

With respect to the alleged obviousness, there must be something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. *Panduit*

Corp. v. Dennison Mfg. Co., 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Health-care Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. The consistent criterion for determining obviousness is whether the prior art would have suggested to one of ordinary skill in the art that the process should be carried out and would have a reasonable likelihood of success viewed in the light of the prior art. Both the suggestion and the expectation of success must be founded in the prior art, not in the Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991; *In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988); M.P.E.P. § 2142.

In the Office Action dated August 22, 2007, the Examiner indicated that ***Pasadyn*** does not disclose or make obvious all of the elements of claim 1 of the present invention. Applicants agree but also respectfully assert that ***Allen*** does not make up for this deficit. The instant application is assigned to Advanced Micro Devices, Inc. At the time of the instant invention, United States Patent No. 6,773,931 (***Pasadyn***) and U.S. Patent No. 7,051,250 (***Allen***) were also assigned to Advanced Micro Devices, Inc. Further, both ***Pasadyn*** and ***Allen*** would be prior art under 35 U.S.C. 102(e). Because the instant application and the cited patents were commonly owned at the time of the invention, Applicants are entitled under 35 U.S.C. § 103(c) to disqualify ***Pasadyn*** and ***Allen*** as prior art under 35 U.S.C. § 103(a). Applicants respectfully request the rejection of these claims be withdrawn.

Further, even if ***Pasadyn*** and ***Allen*** were to be used as prior art their combination would be taught, disclosed, or made obvious by their combination. ***Pasadyn*** is directed to a dynamic

targeting for a process control system. ***Pasadyn*** is directed to dynamically adjusting a process target setting based upon correlation of electrical data with manufacturing data. ***Pasadyn*** discloses performing continuous targeting adjustments to process operation performing a dynamic targeting process that includes adjusting a control model, and then monitoring the process operation performed by a system and adjusting the control parameter, affecting the process operation. *See,* column 8, lines 33-41. The deficit of ***Pasadyn*** is not made up for by ***Allen***.

Allen is directed to changing the routing of a second workpiece from a first processing tool to a second processing tool based upon first processing tool processing a first workpiece and the system detecting a false condition associated with the first processing tool. In other words, ***Allen*** is directed to detecting fault relating to a processing tool and then changing the dispatching of a subsequent semiconductor wafer from the first processing tool that contains the fault to a second processing tool. Contrary to the Examiner's assertion, ***Allen*** does not disclose any subject matter to make obvious the dynamic metrology routing adjustment process called for by claim 1 of the present invention. There is no disclosure in ***Allen*** relating to any type of a correlation of tool state analysis to a batch of workpiece. Further, ***Allen*** is not directed to metrology routing based upon any type of a correlation. As mentioned above, ***Pasadyn*** also does not disclose the dynamic metrology routing of claim 1 of the present invention and is discussed herein. ***Allen*** also does not disclose subject matter. Therefore, ***Pasadyn***, ***Allen*** or their combination do not make obvious or anticipate the dynamic metrology routing adjustment process called for by claim 1 of the present invention. Accordingly, claim 1 of the present invention is allowable. As indicated above, ***Pasadyn*** and ***Allen*** are not available as prior art, therefore, claim 1 of the present invention is allowable.

Independent claim 13 calls for a fault detection analysis and correlating tool help assessment to batches of workpieces to perform an adjustment of metrology routing. As described above, neither ***Pasadyn*** or ***Allen*** teaches such subject matter and, therefore, claim 13 of the present invention is allowable. Still further, claim 16 calls for means for performing the dynamic metrology data adjustment process described above and is described herein. This subject matter is also not taught, disclosed or suggested by ***Pasadyn***, ***Allen*** or their combination. Still further, claim 17 and 22 calls for a process controller that is capable of performing the dynamic metrology routing adjustment process described above and as described herein, ***Pasadyn***, ***Allen*** or their combination does not make obvious correlating tool state data to a batch of workpieces and adjusting a metrology routing process based upon this correlation. Therefore, claims 17 and 22 of the present invention are allowable for at least the reasons cited herein. Further, claim 26 calls for a computer readable program storage device encoded with instructions that when executed by a computer performs a dynamic metrology routing adjustment process described above. As described herein, ***Pasadyn***, ***Allen*** or their combination do not make obvious or anticipate the correlation of tool state analysis to a batch of workpieces and adjusting a metrology routing based upon the correlation. Therefore, claim 26 of the present invention is also allowable. 1, 13, 17, 22, 26, 38, 42, 44, 46, are also allowable for at least the reasons cited herein.

Further, method claim 38 calls for performing a dynamic metrology data adjustment process that includes correlating tool state analysis to a batch of workpieces in adjusting metrology data routing based upon the correlation, which includes modifying the position of the batch in a metrology queue. As described above, this correlation and adjustment of metrology routing is not taught, disclosed or suggested, or made obvious, by ***Pasadyn***, ***Allen*** or their

combination. Similarly, independent claim 42 calls for a process controller that is capable of performing the correlation of tool state analysis to the workpieces and adjusting metrology routing process and therefore, for at least the reasons cited above, is not taught, disclosed or made obvious by ***Pasadyn***, ***Allen*** or their combination. Still further, independent claims 44 and 46 calls for adjusting the metrology routing based upon correlation of tool state data and for at least the reasons cited above, are not taught, disclosed or made obvious by ***Pasadyn***, ***Allen*** or their combination.

Accordingly, independent claims 1, 13, 16, 17, 22, 26, 38, 42, 44, and 46 are allowable for at least the reasons cited herein. Further, claims 2-12, 14-15, 18-21, 23-25, and 27-37, 39-41, 43, 45, 47-50 which respectively depend from claims 1, 13, 17, 22, 26, 38, 42, 44, 46, are also allowable for at least the reasons cited herein.

Further, Applicants acknowledge and appreciate that the Examiner has indicated that claims 3, 5, 6-12, 14-15, 19, 24, 27-37, 45, 49-50 are allowable because they contain subject matter but have been objected to because they depend on rejected claims. However, in light of the arguments presented herein, all independent claims of the present invention are allowable and, therefore, claims 1-50 of the present invention are allowable for at least the reasons cited herein.

Reconsideration of the present application is respectfully requested.

In light of the arguments presented above, a Notice of Allowance is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, **the Examiner is requested to call the undersigned attorney** at the Houston, Texas telephone number (713) 934-4069 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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